DEVELOPMENTS IN TRANSMISSION AND DRIVELINE TECHNOLOGY

SALANDOS

Institution of MECHANICAL ENGINEERS

Automobile Division **Seminar**

13 June 2017 Birmingham

SEMINAR SPEAKERS INCLUDE:

Steve Nesbitt, TRANSCEND Manager, Transmission, Driveline & E-Drives Jaguar Land Rover

Rob Parkinson, Technical Head -Driveline & Transmission Systems Ricardo

John Bickerton, Head of Engineering & Innovation Reading Buses

Alan Williams, Principal Analyst **JCB**



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SUPPORTING ORGANISATION:









DEVELOPMENTS IN

TRANSMISSION AND DRIVELINE **TECHNOLOGY**

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THIS UNIQUE TECHNICAL SEMINAR WILL PROVIDE YOU WITH THE **OPPORTUNITY TO KEEP ABREAST** OF THE LATEST DEVELOPMENTS IN PASSENGER CARS. ADDITIONALLY **GAIN INSIGHT ACROSS THE AUTOMOTIVE INDUSTRY FOR BOTH** ON AND OFF-HIGHWAY.

Delve into the latest developments in hybrid technology and the electrification of drivelines. The seminar programme will provide an all-round perspective of the innovations and trends facing the industry. This includes fuel economy, emissions reduction and improving driveability.

KEY PROGRAMME HIGHLIGHTS:

- Case study on electrified transmission from **Jaguar Land Rover**
- Panel discussion on the future trends and technologies in transmissions and drivelines that will be sustainable and applicable across industries
- New developments in conventional and hybrid transmission synthesis from Ricardo
- Examination of the latest technology and architecture to reduce emissions, improve fuel economy and efficiency in Heavy Goods Vehicles from JCB

FEEDBACK FROM THE LAST EVENT:

This event allows engineers to gain an insight into the latest developments in technology and provides a forum for a wide variety of technical discussions with experts

Lubrizol

6677

Excellent event with interesting insight into driveline systems and new ideas

JCB

ATTEND THIS SEMINAR TO:

- Gain updates on the latest developments and trends in hybrid, electrification and CVT technology from key OEMs and Tier 1 manufacturers
- Hear from the next generation of engineers in the NextGen Innovation Competition to showcase the most innovative papers coming through the industry
- Receive insights on the latest thinking with emissions and CO2 reductions
- Stay up-to-date with ongoing research in hybrid and electric vehicle transmissions
- Learn about the latest developments with on and offhighway including, bus, HGV, taxi and tractor transmissions

ORGANISING COMMITTEE:

Automobile Division

Institution of Mechanical Engineers

MEMBERS CREDITS:

Dave Simner, Course Director for Military Vehicle Technology

Cranfield University

Mike Blundell, Professor of Vehicle Dynamics and Impact, Centre for Mobility and Transport

Coventry University

Chris Brace, Professor of Automotive Propulsion

University of Bath

Sam Akehurst, Reader in Advanced Powertrain Systems

Powertrain & Vehicle Research Centre

PROGRAMME

	13 JUNE 2017		
08:30	REGISTRATION AND REFRESHMENTS		
09:00	CHAIR'S OPENING REMARKS		
	RECENT DEVELOPMENTS AND FUTURE OUTLOOK		
09:10	TRANSCEND: THE ELECTRIFIED TRANSMISSIONS SYSTEM Steve Nesbitt, TRANSCEND Manager, Transmission, Driveline & E-Drives, Jaguar Land Rover		
09:35	NEW DEVELOPMENTS IN CONVENTIONAL AND HYBRID TRANSMISSION SYNTHESIS Rob Parkinson, Technical Head – Driveline & Transmission Systems, Ricardo		
10:00	TRANSMISSIONS FOR FUTURE VEHICLES James McCardle, Assistant Chief Designer, XTRAC		
10:25	QUESTION AND ANSWER SESSION		
10:35	CRYSTAL BALL GAZING HOTSPOTS DISCUSSION: FUTURE TRENDS AND TECHNOLOGY Jérôme Mortal, Chief Engineer Transmissions, Driveline & E-Drives, Jaguar Land Rover Julien Maynard, Head of Engineering for Transmission and Driveline, Ricardo		
11:00	NETWORKING REFRESHMENT BREAK		
	OFF-HIGHWAY APPLICATIONS AND ADVANCED TRANSMISSIONS		
11:30	EXAMINING THE DUALTECH VT TRANSMISSION AND THE IMPLICATIONS FOR EFFICIENCY Alan Williams, Principal Analyst, JCB		
11:55	LUBRICATION TECHNOLOGY AS AN ESSENTIAL DESIGN COMPONENT OF ADVANCED TRANSMISSIONS Michael P. Gahagan, Technology Manager, Driveline, Lubrizol		
12:25	QUESTION AND ANSWER SESSION		
12:40	NETWORKING LUNCH		
	DEVELOPMENTS IN HYBRIDISATION AND FUTURE TECHNOLOGIES		
13:40	DEVELOPMENTS IN HYBRID TRANSMISSIONS RELATED TO PREX Jörn Behrenroth, Managing Director, FEV		
14:05	DEVELOPING THE HYBRID POWERTRAIN FOR THE NEW METROCAB: WHY RANGE EXTEND LONDON'S ULTRA-LOW EMISSION TAXI? Robert Carter, Senior Powertrain Engineer, Frazer-Nash Research		
14:30	QUESTION AND ANSWER SESSION		
14:40	NETWORKING REFRESHMENT BREAK		
15:10	THE FUTURE OF 48V HYBRID TRANSMISSIONS Simon Shepherd, Head of Control and Electronics, DSD		
15:35	UPGRADES FOR HYBRID BUS POWERTRAINS John Bickerton, Head of Engineering & Innovation, Reading Buses		
16:00	QUESTION AND ANSWER SESSION		
16:10	NEXT GENERATION INNOVATION COMPETITION Call for presentations competition. The conference committee will judge the entries and select three students to present their latest paper with 10 minutes each to delve into the details and time for Q&A. The winner will be judged and win a prize.		
16:55	CHAIR'S CLOSING REMARKS		
17:00	END OF SEMINAR		

- This programme is subject to change
- The Institution is not responsible for the views or opinions expressed by individual speakers

HOW TO BOOK YOUR PLACE

FEES AND CHARGES

Registration fees include entry to the sessions, refreshments and a copy of the conference proceedings.

Seminar	Early Bird Rate Until 28 April 2017	Standard Rate
Member, Institution of Mechanical Engineers / Supporting Organisation	£270 + VAT = £324	£300 + VAT = £360
Non-member	£410 + VAT = £492	£480 + VAT = £576
Student/Retired	£90 + VAT = £108	£100 + VAT = £120

Group booking discounts are available. Contact us for more information.

THREE WAYS TO BOOK

1 Online:

www.imeche.org/driveline

2 Email:

eventenquiries@imeche.org

3 Phone

+44 (0)20 7973 1251

Please read the information listed below as each booking is subject to the Institution's standard terms and conditions.

CONDITIONS OF BOOKING

Completed application forms should be returned to the address above, along with the correct payment. Attendance at the event will be confirmed on receipt of the full balance. All participants are advised to bring a copy of their confirmation with them on the day, to ensure the fastest possible entry.

SPECIAL REQUIREMENTS

Please inform us of any special requirements, ie dietary or access, on the relevant section of this form.

CANCELLATION

For a refund (minus £25+VAT admin charge), cancellations must be received at least 30 days prior to the event. Replacement delegates are welcome at any time. The Institution reserves the right to cancel any event. In this case, the full fee will be refunded unless a mutually convenient transfer can be arranged. In the event that the Institution postpones an event for any reason

and the delegate is unable or unwilling to attend on the rescheduled date, they will receive a full refund of the fee paid. The Institution is not responsible for any loss or damage as a result of a substitution, alteration or cancellation/postponement of an event. The Institution shall assume no liability whatsoever if this event is cancelled, rescheduled or postponed due to a fortuitous event, Act of God, unforeseen occurrence or any other event that renders performance of this conference impracticable, illegal or impossible. For the purposes of this clause, a fortuitous event shall include, but not be limited to: war, fire, labour strike, extreme weather or other emergency.

Please note that while speakers and topics were confirmed at the time of publishing, circumstances beyond the control of the organisers may necessitate substitutions, alterations or cancellations of the speakers and/or topics. The Institution reserves the right to alter or modify the advertised speakers and/or topics if necessary without any liability to you whatsoever. Any substitutions or alterations will be updated on the event's webpage as soon as possible.

LIABILITY

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CONFERENCE VENUE

Birmingham

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OTHER EVENTS TO LOOK FOR



OFF-HIGHWAY VEHICLES

25 April 2017, The Studio, Birmingham

Off-Highway Vehicles will bring together engineers from across the off-highway sectors to share their experiences, case studies and hear about emerging technologies.

www.imeche.org/offhighway



VTMS 13: VEHICLE THERMAL MANAGEMENT SYSTEMS

17-18 May 2017, ILEC Conference Centre, London

VTMS 13 will cover the latest advances in the field of heat transfer, energy management, thermal comfort and all thermal systems within the vehicle.

www.imeche.org/vtms

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